

# EXTENSION EDUCATION



## Chapter – V

### 5.1 Directorate of Extension Education

The Directorate of Extension Education was established according to the Chapter-3, Part-IX vide Section 14.1(3) of the Gujarat Agricultural Universities Act-2004, for dissemination of the research findings and technical information through extension education programmes. The main function of the Directorate is to plan, coordinate, organize and guide the extension education programmes in the University and to ensure efficient working of the extension activities in close coordination with other departments and state voluntary organizations, other officers and scientists of the University. Extension Education is one of the triple functions of the Junagadh Agricultural University to boost up the agricultural production. The University has been

making substantial contribution in diffusing and communicating agricultural technologies among the extension personnel and farming community of the region. The technologies generated in agriculture and allied sciences by the University are being transferred to the end users. Dr. H. M. Gajipara supervised and guided the extension education activities during the reporting year.

### 5.2 Extension Education Council

The Extension Education Council was constituted according to the provision of the Gujarat Agricultural Universities Act-2004 in exercise of the statutes No S.31 & notification of Registrar No. JAU/Reg/Aca-2/Ext.Edu. Council/13887-13936/2013, date 31-07-2013. 15<sup>th</sup> Extension Education Council meeting was organized on 29.10.2021.

#### Extension Education Council:

No.	Designation/ Department	Position
1	Prof. (Dr.) Narendra Kumar Gontia, Hon'ble Vice Chancellor, JAU, Junagadh	Chairman
2	Dr. P.M. Chauhan, Director of Research & Dean PG, JAU, Junagadh	Member
3	<b>The Deans of all Faculties</b>	
i	Dr. S.G. Savalia, Principal & Dean, College of Agriculture, JAU, Junagadh	Member
ii	Prof. (Dr.) Narendra Kumar Gontia, Principal & Dean, College of Agril. Engg. & Technology, JAU, Junagadh	Member
iii	Dr. C. D. Lakhlani, Principal & Dean, PGI ABM, JAU, Junagadh	Member
4	<b>Five Officer / Extension Education Specialists (Nominated by the Vice Chancellor)</b>	
i	Dr. N.B. Jadav, Professor & Head, Department of Extension Education, CoA, JAU, Junagadh	Member
ii	Dr. B. N. Kalsariya, Principal, Polytechnic in Agriculture, JAU, Sidsar	Member
iii	1. Dr. N. S. Joshi, Senior Scientist & Head, Krishi Vigyan Kendra, JAU, Amreli	Member
	2. Dr. L.L. Jivani, Senior Scientist & Head, Krishi Vigyan Kendra, JAU, Gor Khijadiya (Morbi)	Member
iv	Prof. V.G. Barad, Assistant Extension Educationist, Sardar Smruti Kendra, JAU, Junagadh	Member
5	<b>The Eminent Extension Education Specialists concerned with farmers' training from outside the University co-opted by the organization</b>	
i	Dr. P.R. Kanani, Retd. Professor, Block No. 47, Rajmoti Society, B/h. Bilnath Temple, Vanthali Highway, Junagadh	Member
ii	Dr. M.N. Popat, Retd. Professor, "Krupa Sindhu", Street No. 11, Block No. 324, Rayajinagar Society, Junagadh	Member
iii	Dr. D.M. Thakrar, Retd. Professor, Block No. 403, Giriraj Palace, Near Rameshwar temple, B/h. Bus Station, Junagadh	Member



No.	Designation/ Department		Position
6	<b>Director of Agriculture/ Horticulture &amp; Animal Husbandry, GoG, Gandhinagar</b>		Member
7	<b>Two Progressive farmers (Nominated by the Vice Chancellor)</b>		
	i	Shri Vitthalbhai Nanjibhai Sakhiya, Krushna nagar, Kalavad- Dhoraji Road, Kalavad, Dist. Jamnagar	Member
	ii	Shri Arvindbhai Mohanbhai Patoliya, “Star Plaza”, Jin plot, Najapur Road, Mendarada	Member
8	Dr. G.R. Gohil, Associate Director of Extension Education, JAU, Junagadh		Member
9	Dr. H.M. Gajipara, Director of Extension Education, JAU, Junagadh		Member Secretary
10	i	Dr. D.R. Mehta, Principal, College of Agriculture, JAU, Amreli	Invited Member
	ii	Director of Extension Education, AAU, Anand	
	iii	Director of Extension Education, NAU, Navsari	
	iv	Director of Extension Education, SDAU, S.K. Nagar	
	v	Dr. K.C. Patel. Director (IT), Information Technology Cell, JAU, Junagadh	

### 5.3 Extension Education and Training Centres

No.	Course / Programme	Location
<b>Diploma/Certificate Courses</b>		
1	School of Baking	Junagadh
2	<i>Mali</i> Training Centre	Junagadh
3	Agro Based ITI Centre	Junagadh, Mahuva
<b>Training Programmes for Extension Workers</b>		
1	Training & Visit System Training Centre	Junagadh, Targhadia
2	Centre of Excellence for Training (Oilseeds)	Junagadh
<b>Extension activity and Training Programmes Centres for Farmers/Farm Women</b>		
1	Krishi Vigyan Kendra	Jamnagar, Targhadia (Rajkot-I), Amreli, Khapat (Porbandar), Nanakandhasar (Surendranagar), Pipaliya(Rajkot-II), Gorkhijadiya (Morbi)
2	Sardar Smruti Kendra	Junagadh
<b>Extension Education Programmes for Rural People</b>		
1	Farm Advisory Service Centre	Junagadh
2	Extension Programme for Fisheries	Okha

### 5.4 Extension Education and Training Programmes

#### (I) Diploma/Certificate Courses for Farm Youths

The Junagadh Agricultural University continued various Diploma/ Certificate courses during the year under report as per the details given below.





No.	Name of Course	Duration	Location	No. of participants Completed the Course
1	Bakery Training			
	• Basic Course in Baking Science	15 weeks	Junagadh	26
	• Special Training to Women	1 week	Junagadh	0
3	Mali Training	6 months	Junagadh	14
4	Agro Based ITI Centre	6 months	Junagadh	
	• Seed Production Technology	6 months	Junagadh	0
	• Green House Construction & Systems Management	6 months	Junagadh	04

All these courses are aiming to impart skill oriented practical training to farmers' son/daughter in

order to provide an opportunity for self-employment and employment in different organizations.



Agro ITI Students during practical work



Agro ITI Students visit seed testing Lab



15-week course at Bakery Shala



15-week course certificate distribution at Bakery Shala



Examination of *Mali* TrainingCertificate distribution of *Mali* Training

## (II) Training Programmes for Extension Workers / Officers

### (A) Training & Visit System

Junagadh Agricultural University has taken-up the task of training to the extension personnel of the Department of Agriculture and Horticulture, Government

of Gujarat through Training & Visit System. The bi-monthly workshops, pre-seasonal training workshops and short-term training programmes were organized for the participants (DAO/ SMSs/ AEOs/KVKs) who attended the programmes is as under.

No.	Type of programme	No. of Programmes	No of Participants
1	Bimonthly Workshop	03	132
2	Pre-seasonal Training Programme	02	92
3	Khedut Shibir	11	732
	<b>Total</b>	<b>16</b>	<b>956</b>



Online Bi-monthly training programme under T &amp; V scheme



Online Pre-Seasonal training programme under T &amp; V scheme

### (B) Other Training Programmes

The centre has continued to provide scientific knowledge to the farmers. The detail of the programmes are as under.

### *Khedut shibir and Diagnostic team visit*

No.	Subject	No. of Activities	No. of Scientists involved	Beneficiaries
1	<i>Khedut Shibir</i>	124	222	3726
2	Diagnostic Team Visit	41	124	1146



Online farm women training programme under COC Scheme



Farmers training programme under COC scheme



Online farmers training programme under COC Scheme



*Khedut Shibir* at Ajota village under COC Scheme

### Training programmes for Input Dealers during 2021-22:

No.	Title of course	Duration	Participants
1	Certificate course on Pesticide Management	12 week	771
2	Certificate course on Pesticide Management	12 week	1041
3	Certificate course on Pesticide Management	12 week	1125
<b>Total</b>			<b>2937</b>





Inauguration of Input Dealers course at Junagadh



Input Dealers course manual release



Examination of Input Dealers at Junagadh



Oral Examination of Input Dealers course at Junagadh

### Training programmes for Fertilizer Dealers during 2021-22:

No.	Title of course	Date	Duration	Participants
1	Integrated Nutrient Management for Fertilizer Dealers	09/08/2021 to 26/08/2021	15 Days	59
2	Integrated Nutrient Management for Fertilizer Dealers	20/09/2021 to 07/10/2021	15 Days	54
3	Integrated Nutrient Management for Fertilizer Dealers	18/10/2021 to 02/11/2021	15 Days	61
4	Integrated Nutrient Management for Fertilizer Dealers	09/12/2021 to 23/12/2021	15 Days	64
<b>Total</b>				<b>238</b>





Group photo of Fertilizer Dealers

### (III) Training / Extension Education Programmes for Farmers/Farm Women

#### (A) Training Programmes

Training is essential to increase the efficiency of farmers, farmwomen, rural youth and other stakeholders *etc.* On-campus as well as Off-campus



Certificate distribution to the Fertilizer Dealers

training programmes were organized based on the need and interest of the farming community.

Through the Transfer of Technology (TOT) Centres, 202 On-campus and 238 Off-campus training programmes were organized, wherein 15255 participants received training. The details are given in Table 5.1.

**Table 5.1 Training programmes organized by the Transfer of Technology Centres (KVKs) for farmers/ farm women during the year 2021-22**

No.	TOT Centres		No. of Trg. Prog.	No. of participants		Total
				Male	Female	
1	KVK, Jamnagar	A	15	290	328	618
		B	34	814	617	1431
2	KVK, Targhadia	A	27	590	90	680
		B	38	891	83	974
3	KVK, Amreli	A	67	1500	2026	3516
		B	58	1168	1358	2526
4	KVK, Khapat	A	27	340	220	560
		B	30	213	372	585
5	KVK, Nanakandhasar	A	26	427	230	657
		B	20	414	62	476
6	KVK, Pipalia	A	16	254	178	432
		B	29	588	206	794
7	KVK, Gor Khijadiya	A	24	744	233	977
		B	29	794	235	1029
	Total	A	202	4145	3305	7440
		B	238	4882	2933	7815
Grand Total			440			15255

A= On-campus B= Off-campus



On Campus training programme at KVK, Morbi



Off Campus training programme by KVK, Nana Kandhasar

### (B) Extension Activities

The Transfer of Technology (TOT) centres also planned and organized extension activities like seminars/workshops/symposium, field/farmers' day, agriculture fair/exhibitions, film/slide/video shows, field visits, cattle camps, farmers' group/demonstration meetings *etc.* by which total 73,256 farmers, farm women, youth and other stakeholders benefitted. The details of the extension activities and number of participants are given in Table 5.2

KVKs play an important role to provide guidance for income generation to the farmers by imparting skill-oriented trainings. Besides this, KVKs also conducted different types of extension activities, field day, cattle camp, on farm testing, diagnostic team *etc.* The KVKs are also collecting feedback on farmers' problems, which were sent to the concerned scientists for guidance and solution with guideline in reforming further research.

**Table 5.2 Extension activities carried out by TOT centres during 2021-22**

No.	Name of activity	KVK							Total
		Targhadia	Jamnagar	Khapat	Amreli	Nana Kandhasar	Pipalia	Gor Khijadia	
1	Krusha Mela	0	0	1 (35)	0	0	0	0	1 (35)
2	Field day	6 (133)	8 (117)	0	15 (228)	3 (89)	7 (62)	3 (95)	105 (724)
3	Guidance on farm	12 (25)	17 (182)	16 (77)	41 (827)	0	30 (105)	33 (146)	149 (1362)
4	Guidance to visitors	42 (465)	151 (1266)	126	51 (1211)	(1397)	50 (1065)	69 (351)	489 (5755)
5	Press note	10	24	4	30	19	5	25	117
6	Khedutshibir/ Night shibir/ Group discussion	11 (331)	11 (363)	0	2 (158)	2 (34)	4 (111)	18 (109)	48 (1106)



No.	Name of activity	KVK							Total
		Targhadia	Jamnagar	Khapat	Amreli	Nana Kandhasar	Pipalia	Gor Khijadia	
7	Guidance through Telephone	(346)	(4342)	(442)	(1258)	(2905)	(1150)	(1823)	(12266)
8	Krushigosthi/ Seminar	2 (413)	10 (1260)	3 (111)	0	0	3 (62)	18 (132)	36 (1978)
9	Khedut meeting	4 (52)	4 (51)	0	0	1 (510)	20 (689)	03 (206)	32 (1508)
10	T.V. Programme	0	3	0	0	0	10	0	13
11	Radio talk	0	3	4	14	5	0	0	26
12	Popular articles	0	9	1	4	0	4	17	35
13	Video show/ Film show	1 (52)	11 (794)	0	15 (663)	41 (1682)	3 (198)	05 (442)	76 (3831)
14	Cattle camp	1 (78)	0	0	0	1 (200)	3 (40)	0	5 (318)
15	Literature distribution	5 (950)	21 (1917)	5 (2175)	0	11 (755)	10 (475)	07 (510)	59 (6782)
16	Literature published	0	10	0	0	0	4	0	14
17	Lectures delivered	21 (1489)	125 (6357)	31 (561)	116 (4106)	361 (8389)	10 (427)	05 (236)	669 (21565)
18	Scientist's Farm visit	12 (25)	26 (350)	16 (77)	48 (994)	15 (825)	30 (105)	25 (146)	172 (2522)
19	Vocational training	5 (250)	1 (30)	1 (15)	1 (40)	0	2 (77)	01 (29)	11 (441)
20	Sponsored/ Collaboration training	5 (146)	2 (62)	12 (1770)	5 (160)	40 (2488)	18 (666)	06 (287)	88 (5579)
21	Diagnostic team	2 (21)	6 (31)	4 (37)	8 (40)	0	42 (186)	05 (50)	67 (365)
22	Student (RAWE)	1 (53)	0	1 (38)	3 (89)	3 (107)	0	0	8 (287)
23	Celebration of Technology Week	1 (686)	1 (520)	1 (315)	1 (291)	1 (357)	1 (281)	1 (131)	7 (2581)



No.	Name of activity	KVK							Total
		Targhadia	Jamnagar	Khapat	Amreli	Nana Kandhasar	Pipalia	Gor Khijadia	
24	Soil Sample Analyzed	50	130	62	119	0	0	38	399
25	Participated in Agril. Exhibition	0	1 (1787)	1	8	7 (557)	0	0	17 (2344)
26	Any other please specify	0	0	0	0	15 (661)	15 (708)	03 (538)	33 (1907)
<b>Total</b>									<b>2676 (73256)</b>

Figures in parentheses indicate number of beneficiaries/copies

### (C) Front Line Demonstrations (FLD)

The aim of Front Line Demonstration is to demonstrate the production potentialities of newly released and pre-released production technologies of cotton, wheat, cumin, vegetables, pulses and oilseeds on farmers' fields.

In all, **968 FLDs** were conducted on various oilseeds and pulses, Crop technologies viz., castor, mustard, groundnut, sesamum, cotton, gram, wheat, pearl millet and cumin crop technologies in **323 ha** during *kharif* and *rabi* seasons through KVKs. The results are present in Table 5.3

**Table 5.3 Performance of Frontline Demonstrations organized during 2021-22**

No	Centre	Crop	Variety/ Treatment	No. of FLDS	Area (ha)	Av. yield (q/ha)		Increase in yield (%)
						Demo.	Local check	
1.	KVK, Targhadia	Groundnut	Varietal evaluation (GJG-22) + IPM	10	4.0	27.00	21.00	28.60
		Groundnut	Varietal (GJG-32) + INM+IDM + IPM	10	4.0	29.00	23.00	26.08
		Gram	Varietal evaluation (GG-5 )	50	20	23.75	20.50	15.85
		Cumin	IPM (GC-4)	10	4	11.69	9.73	20.00
		Cumin	IDM (GC-4)	5	2	12.25	10.50	14.28
2.	KVK Jamnagar	Sesame	Guj. Til. 5 seed, <i>Trichoderma</i> , <i>Beauveria</i> , <i>Azotobacter</i> , PSB	25	10	7.75	6.85	13.14
		Groundnut	Improved var. Seed (GJG-22), <i>Metarhizium</i> <i>anisopliae</i> , <i>Trichoderma</i> , PSB, <i>Rhizobium</i>	25	10	16.18	15.02	7.72



No	Centre	Crop	Variety/ Treatment	No. of FLDS	Area (ha)	Av. yield (q/ha)		Increase in yield (%)
						Demo.	Local check	
		Castor	Variety GCH-9	20	8	34.69	31.06	11.67
		Chickpea	Varietal (GG-5), <i>Trichoderma</i> , PSB, <i>Rhizobium</i> , <i>Beauveria bassiana</i>	50	20	22.16	20.48	8.18
		Pearl Millet	Pearl millet Seed (GHB-1231)	10	4	47.63	46.19	3.11
		Wheat	Variety –GW 463	10	4	51.75	46.75	10.78
		Ajwain	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB	10	4	10.93	10.29	6.20
		Cumin	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB,	20	8	7.81	7.08	10.42
		Coriander	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB,	20	8	12.21	11.01	10.90
		Cotton	Azadirachtin, Profenophos., MDP, HNPV, <i>Beauveria bassiana</i>	25	10	13.45	11.20	20.72
		Kitchen Garden	Vegetable seed, <i>Beauveria bassiana</i>	50	2	536 kg/unit	418.40	28.11
		Chicory	<i>Beauveria</i> , <i>Azotobactor</i> , PSB	5	2	137.50	120.0	4.67
		Cotton	Cotton picking Apron	5	2	3.74 kg/hr	3.38	10.71
		Animal (Cow)	Bypass Fat	3	0	1070 li./5 months	930	15.05
3.	KVK Amreli	Castor	GCH-9	10	4	28.24	24.79	14.30
		Cotton	INM	10	4	12.2	11	10.91
		Wheat	INM	10	4	49.12	42.696	15.05
		Cumin	IDM	10	4	8.86	7.62	16.27
		Coriander	GC-2	10	4	11.87	10.03	18.34
		Sesame	GT-3	10	4	12.21	10.68	14.33
		Black Gram	Guj. Urd.-2	10	4	9.736	8.43	15.49
		Green Gram	GM-6	10	4	8.58	7.48	14.71

No	Centre	Crop	Variety/ Treatment	No. of FLDS	Area (ha)	Av. yield (q/ha)		Increase in yield (%)
						Demo.	Local check	
4.	KVK Khapat	Groundnut	GJG-22	10	4.0	20.87	18.81	11.08
		Chickpea	GG-1/Digvijay	10	4.0	24.31	21.81	11.55
		Onion	Pilipati	10	4.0	311.81	279.86	11.58
		Wheat	GW-451	10	4.0	52.75	48.13	9.64
		Kitchen Gardening	5 var. of different veg.	50	2.5	48.70	-	-
5.	KVK Nankhadhas ar	Chickpea	GG-5	10	04	30.13	25.92	16.22
		Cumin	-----	20	08	09.52	08.24	15.59
		Wheat	GW-451	20	08	49.88	42.17	18.27
		Lucerne	AL-3	10	01	405	340	19.12
		Chick pea (CFLD)	GG 5 and Bio agents	50	20	22.51	18.75	20.05
		Onion	Pillipati	10	01	320.67	260.59	23.06
		Sesame	GT-4	10	04	2.84	2.51	13.05
		Groundnut	Gir Sawaj <i>Metarizium</i>	10	04	13.36	12.16	9.89
		Groundnut	Gir Sawaj <i>Trichoderma</i>	05	02	13.15	11.18	17.62
		Cotton	---	10	04	16.59	13.86	19.68
		Groundnut (CFLD)	GJG-22 and Bio Agents	50	20	18.72	13.97	17.82
		Tomato	GT-6 and <i>Beauveria</i>	10	01	275.68	254.49	8.33
6.	KVK Morbi	Groundnut	GJG-32	10	4	35.73	30.18	18.38
		Sesamum	GJT-5	10	4	8.25	8.00	3.10
		Black gram	GU-2	10	4	3.83	3.00	27.60
		Chick pea	GJG-6	10	4	16.52	14.81	11.50
		Pearl millet	GHB-538	5	2	34.62	34.60	4.56
		Pearl millet (Biofortified)	GHB-1129	5	2	36.18	34.60	4.56
		Cotton	Management of pink bollworm- MDP	10	4	17.44	16.51	5.60
		Cumin	Wilt management through <i>Trichoderma</i>	10	4	12.82	11.44	3.20



No	Centre	Crop	Variety/ Treatment	No. of FLDS	Area (ha)	Av. yield (q/ha)		Increase in yield (%)
						Demo.	Local check	
7.	KVK Pipalia	Groundnut	GG - 22	10	4	18.2	19.9	14.47
		Groundnut (Tricho)	GG - 20	10	4	31.6	25.8	22.82
		Groundnut	GG - 20	10	4	32.3	25.3	27.72
		Cotton (INM)	Bt.	10	4	22.0	19.8	11.39
		Cotton (IPM)	Bt.	5	5	21.3	18.3	16.44
		Tomato (INM-Rabi 20-21)	GT-3	10	4	284	272	4.41
		Brinjal (INM-Rabi 20-21)	VNR Harsh F1	10	4	392.5	362.9	8.16
		Onion (INM-Rabi 20-21)	Pili Patti	10	4	254	232	9.48
		Brinjal (IPM- Kharif 21)	ARBH 905	10	4	440.6	403.8	9.11
		Tomato (INM- Kharif 21)	GT-3	10	4	398.9	377.3	5.72
		Kitchen Gardening	Vegetable seeds	50	0.5	1327.08	1109.40	19.62
		Drudgery Reduction (Time saving %)	Rev. Stool & stand	5	0	1.82	2.57	29.22
Total				968	323			

#### (D) Farm Advisory Service Scheme/SSK, Junagadh

The Farm Advisory Service Scheme has been continued at SSK, Junagadh with a view to provide guidance and the latest information to the farmers on scientific farming. The farmers were advised regarding

their farm problems through correspondence and field visits. This centre acted as a link among research scientists, extension workers and farmers. During the year under report, various extension activities carried out by the centre are given below.

No.	Name of activity	No. of activities	No. of participants
1	Agril. Fair	02	19841
2	Agril. Exhibitions	04	18479
3	Guidance (Telephone & Personal Contact)	7715	7715
4	Visitors	4820	4820

**(E) Extension Activities under Centre of Communication (COC) Scheme**

Objectives of COC Scheme

- To establish the *Gram Kisan Samitis* (GKS) in the rural areas.
- To train the members of *Gram Kisan Samitis* in leadership, communication and cooperation for transfer of technologies.
- To disseminate the latest agricultural and allied technologies through *Gram Kisan Samitis* in rural areas.
- To carry out different extension activities through GKS in different villages.
- To know the feedbacks from the farmers.

**Online Training Programmes under Centre of Communication (COC) Scheme**

No.	Subject	No. of Training Programmes	No. of Beneficiaries
1	Agriculture and Animal husbandry	1	35
2	Horticulture crop production	1	45
3	Agriculture	1	110
<b>Total</b>		<b>3</b>	<b>190</b>

**One-Day Training Programmes under Centre of Communication (COC) Scheme**

No.	Subject	Date	No. of Training Programmes	No. of Beneficiaries
1	Agriculture and Animal husbandry	20/09/2021	1	24
2	Horticulture crop production	14/02/2022	1	134
<b>Total</b>			<b>2</b>	<b>158</b>

**Three-Day Training Programmes under Centre of Communication (COC) Scheme**

No.	Subject	Date	No. of Training Programmes	No. of Beneficiaries
1	Animal husbandry	13-15/09/2021	1	40
2	Horticulture crop production	21-23/03/2022	1	54
<b>Total</b>			<b>2</b>	<b>94</b>

**Formation of *Gram Kisan Samitis* during the year 2021-22**

No	Date	Village	Taluka	District	Beneficiaries
1	05/05/2021	Sangodra	Talala	Gir Somnath	12
2	08/05/2021	Prabhatpur	Junagadh	Junagadh	12
3	27/05/2021	Mesvan	Keshod	Junagadh	12
4	06/06/2021	Sergadh	Keshod	Junagadh	12
5	18/06/2021	Vadod	Vadhvan	Surendranagar	12
6	17/07/2021	Katada	Dhrol	Jamnagar	12
7	20/08/2021	Badodar	Keshod	Junagadh	12
8	25/09/2021	Lathodra	Maliya	Junagadh	12
9	10/12/2021	Rajsitapur	Dhagandra	Surendranagar	12



No	Date	Village	Taluka	District	Beneficiaries
10	12/12/2021	Agataray	Keshod	Junagadh	12
11	08/01/2022	Barvada	Kukavav	Amreli	12
12	15/01/2022	Dhamalpur	Rajkot	Rajkot	12
13	10/02/2022	Zalana vadodara	Sutrapada	Gir Somnath	12
14	15/02/2022	Bhanduri	Maliyahatina	Junagadh	12
15	18/02/2022	Ravni	Vanthali	Junagadh	12
<b>Total</b>					<b>180</b>

**Khedut Shibirs organized during the year 2021-22 under COC scheme**

No.	Date	Village	Taluko	District	Beneficiaries
1	18/10/2021	Bhiyal	Junagadh	Junagadh	39
2	25/10/2021	Nandana	Kalayanpur	Jamnagar	115
3	29/11/2021	Sukhpur	Maliyahatina	Junagadh	45
4	08/03/2022	Khambhaliya	Bhesan	Junagadh	38
<b>Total</b>					<b>237</b>

**Bakery Talim organized during the year 2021-22 under COC scheme**

No.	Date	Village	Taluko	District	Beneficiaries
1	29/10/2021	Joshipara	Junagadh	Junagadh	32
2	23/02/2022	Samadhiyala	Bagasara	Amreli	52
3	08/03/2022	Choki	Junagadh	Junagadh	20
4	08/03/2022	Khambhaliya	Bhesan	Junagadh	25
<b>Total</b>					<b>129</b>

**(F) Extension Activities carried out by Extension Education Centres**

Extension activities carried out by various Extension Education Centres during the year are given below.

No.	Name of activity	Sardar Smruti Kendra, Junagadh	Fisheries Res. Station, Okha	School of Baking, Junagadh	Total
1	Krusha Mela	2 (19841)	0	0	2 (19841)
2	Guidance on farm	0	0	0	0
3	Guidance to visitors	(4820)	(471)	0	(5291)
4	Press note	28	0	0	28
5	Khedut shibir/ Night shibir/Group discussion	02 (59)	01 (225)	0	03 (284)
6	Guidance through Telephone	(2895)	(18)	0	(2913)
7	Khedut talim/Khedut Mahila talim	45 (2196)	0	0	45 (2196)
8	Video show/ Film show	0	0	0	0



No.	Name of activity	Sardar Smruti Kendra, Junagadh	Fisheries Res. Station, Okha	School of Baking, Junagadh	Total
9	Literature distribution	03 (6500)	0	0	03 (6500)
10	Literature Publication	03	0	0	03
11	Fisheries Training	0	0	0	0
12	Bakery Training	0	0	23 (1286)	23 (1286)
13	Agri.Exhibition	04 (18479)	0	0	04 (18479)
14	Agri.Literature show	04 (16279)	0	0	04 (16279)
<b>Total</b>					<b>115 (73069)</b>

Figures in parentheses indicate numbers of beneficiaries/copies



Educational Tour - Shree M.J.Kumbhani High School, Plasva, Junagadh



Off Campus Mahila Khedut Talim



Exposure visit - FTC - Dahod



One day Training - ATMA project - Keshod



### Radio Talks and TV Programmes

The scientists of the university delivered radio talks from time to time on various agricultural and allied subjects from All India Radio, Rajkot. Moreover, the broadcast of agricultural messages were also made from All India Radio, Rajkot. During the year, total 26 such talks were delivered on different topics related to agriculture, horticulture, agricultural engineering, animal husbandry, etc.

In all, total 23 television programmes covering various aspects of agriculture, animal husbandry, agricultural engineering, horticulture, fisheries, home science, etc. were telecast through Doordarshan Kendra, Rajkot in “Gram Jagat” “Krishi Darshan” programme for the benefit of farming community.

### AGRISNET studio and Community Radio Station (CRS)

AGRISNET studio is established with objective to produce and disseminate agricultural technologies to farmers through electronic media/ format. Under

LIFE (Live Interaction with Farmers' through Electronic media) two innovative programs started.

Two, LIVE YOUTUBE STREAMING, in which live program broadcasted through YouTube. Reliance Foundation and ATMA project, Junagadh popularized these programs through their farmer related WhatsApp contacts.

The CRS is transmitting four hours program daily. It covers about 12 km area having 45 villages and Junagadh city. To bring larger area under reach of broadcasting radio content, Android Based Mobile Application launched in June 2021. Through audio streaming by this App, the content of Junagadh Janvani 91.2 MHz can be listened by the whole world. There is big response to this App. AGRISNET studio established with objective to produce and disseminate agricultural technologies to farmers through electronic media/ format.

### Different activities of AGRISNET Studio

No.	Subject	No of Programs	Beneficiaries
1	Broadcasting through Radio	14600 programs (1460 Hours Broadcasting)	Farmers, students and people of Junagadh city and surrounding 55 villages
2	Agriculture related events/ documentaries	37	These documentaries were visited by >26,00,000 viewers so far. Subscribed by >43000 subscribers
3	Small Video Clips	31	Farmers of various whatsapp groups of JAU scientist / centers
4	Live broadcasting of program by JAU expert on TV channel Vande Gujarat 04 Talks through BISAG	09	Broadcasting of 60 minutes episode on agri related programs of JAU scientists through BISAG, Gandhinagar on TV Channel Vande Gujarat 04.
5	Talks Through Doordarshan, Rajkot	23	Broadcasting of 25 minutes episode on agri related programs of JAU scientists Doordarshan, Rajkot.
6	Talks through Akashvani, Rajkot	26	Broadcasting of 25 minutes radio episode on agri related programs of JAU scientists Akashvani, Rajkot.



No.	Subject	No of Programs	Beneficiaries
7	Visitors	843	Farmers, students and others for participation in audio recording visited CRS station.
8	Photography	96 Events (4860 Photographs)	For documentation, publication and exhibition/ display of various activities/ events on education, research and extension education of JAU, photography and archive maintenance is carried out at AGRISNET studio.

### Different activities Photographs of AGRISNET Studio



Launching of Android Based Mobile App  
JUNAGADH JANVANI 23-06-2021



Visit of Shri Radha Mohan, Ex- cabinet minister for Agriculture and Farmers' Welfare, Government of India



Visit of Vinod Gontia, Chairman, Tourism Development Corporation, Madhya Pradesh



Radio recording in the Field



Students for recording

### Coordination of Extension Activities with Department of Agriculture, Horticulture, Animal Husbandry and Other Line Departments

Junagadh Agricultural University planned and organized various extension education programmes/activities in coordination with different line departments of the state. The structural linkages exist under T&V system by constituting the technical committee at district, zonal and state level. The agricultural programmes of All India Radio as well as Doordarshan were finalized by such coordinated efforts. In AGRESO, the officers of line departments are the members and they contribute in formulation of technical programmes as well as in finalizing the recommendations for the farmers. The functional linkages also exist under T & V system through bi-monthly workshops, pre-seasonal workshops, fortnightly training, diagnostic team, state level crop seminars/workshop, etc. The coordination exists in follow-up programmes as well as in planning of farm trials. For transfer of technologies to the farmers, the farmer's day, *krushi mela*, group discussion, film show, etc. were organized through collaborative efforts.

### 5.5 Orientation Training Programme

During the year under report, 222 scientists /teachers of the University were deputed in the orientation training programmes/ seminars/ workshops / symposium, etc. organized within and outside the state to upgrade their knowledge and skill for improving faculty competence in respective disciplines.



Recording of Scientists of JAU

### 5.6 Agri Gujarat Expo-2021

The Agri Gujarat Expo-2021 was jointly organized by Junagadh Agricultural University, Junagadh and Spark Media Inc., Ahmedabad from November 19 to 21, 2021 at JAU, Junagadh. The agricultural exhibition organized under Agri Gujarat Expo-2021 spread across 2500 sq. m. The technologies were exhibited in 70 stalls of different agriculture and allied companies, 13 stalls of different departments of JAU, Junagadh and 04 stalls of natural farming.

Under Agri Gujarat Expo-2021, a poster presentation on the theme of agriculture and related subjects was made by the college students of JAU on November 19, 2021. The Seminar on the use of modern technology in agriculture was organized on November 20, 2021. The JAU scientists delivered the lectures on new dimensions of modern technology in agriculture, mango export oriented farming method, scientific animal husbandry business to earn more income, skill development, startup, FPO, agro tourism and use of artificial intelligence in pest control. Apart from this, a seminar for sharing the success stories of farmers was also organized on November 21, 2021. Nine farmers delivered the talk on innovative approaches adopted by them successfully.

During the Agri Gujarat Expo-2021, about 12000 farmers and farm women from more than 325 villages of Saurashtra enthusiastically participated and got up-to-date information on agriculture, agricultural engineering and allied subjects. Approximately 2000 students of schools and colleges, scientists and local resident from the city participated in the event.





Inauguration of Agri Gujarat Expo-2021



Participants of Agri Gujarat Expo-2021



Farmers Falcitated in Agri Expo-2021



Farmers visited Exhibition of Agri Expo - 2021



Dignitaries visited the Exhibition at Agri Expo-2021



Seminar opening during Agri Expo-2021





Farmer at Agri Expo-2021



Poster presentation by JAU students during Agri Expo - 2021

### Subhash Palekar Prakrutik Krushi Talim Karyshala

Subhash Palekar Prakrutik Krushi Talim Karyshala was Jointly organized by Junagadh Agricultural University, Junagadh and ATMA Project, Gandhinagar & *Prakrutik Kheti Sanyojak Samiti*, Gujarat on 11<sup>th</sup> to 13<sup>th</sup> March, 2022 at Shri Swaminarayan

Mukhya Mandir, Jawahar Road, Junagadh during the programme around 2000 participants including natural farming following farmers and ATMA staffs belong to 10 districts of Saurashtra region participated in the programme.



Inaugural speech by Hon' Vice chancellor of JAU



Participants of Karyashala



Inaugural speech by dignitaries

## 5.7 ICAR projects

### 1. Farmer FIRST programme

The farmer FIRST programme was started on 30<sup>th</sup>, January 2017 by Junagadh Agricultural University under ICAR. Under this programme, during the year 2021-22, total 454 small and marginal farmers including SC farmers and women farmers were selected on the basis of the land holdings, irrigation facilities, crops grown, available resources and their interest in particular module with consideration of prescribed objectives and norms as per the ICAR guidelines for the project. The basic

survey was carried out for planning to conduct experiments on Crop-based module, NRM based Module, Crop diversification based module, Horticultural based module and Livestock based module in four villages (Nava vaghaniya, Mavjinjava, Hadala and Deri- pipaliya of Amreli districts). The inputs were distributed to the farmers of these village according to modules. They were given training and advisory to utilise these inputs with available resources in their farms. The results of different modules were presented in annual meeting of Farmer FIRST Project.

#### 5.7.1 Results of demonstrations on farmers' fields under different modules during 2021-22

No.	Modules	Av. Yield (q/ha)		Gross Income(Rs/ha)		Net Income (Rs/ha)	
		Before	After	Before	After	Before	After
1	Wheat	37.20	42.35	73,470	83,641	40,782	50,391
2	Gram	17.11	20.45	68,466	81,820	34,965	45,700
3	NRM-Gram	17.92	21.27	98,534	1,16,984	63,894	80,844
4	Livestock	07.42 lit/buffalo/day	08.58 lit/buffalo/day	1,06,848	1,23,552	86,848	98,072

During the year, extension activities were carried out for effective implementation of farmer FIRST project and to motivate farmers to adopt the

recommended crop production, dairy farming, Integrated Farming, value addition practices for increasing farmers' income and employment generation.

#### Photographs of different activities carried out under Farmer FIRST Project



Field observation by scientists



Explanation about intervention





Field visit by Principal Investigator



Field visit by scientists



On farm meeting with farmers



Farmers meeting for organic farming & FPO



Distribution of watermelon seed and mulching material



Explanation about intervention and group discussion



## 2. Mera Gao Mera Gavarav (MGMG)

“Mera Gaon Mera Gaurav” Scheme was launched by Hon'ble Prime Minister on July 25, 2015 on the 87<sup>th</sup> Foundation Day of the ICAR & KVK Conference at Patna.

For implementation for MGMG scheme in Junagadh Agricultural University, total 30 teams of 117 scientists were deputed covering 150 villages of Saurashtra region of Gujarat for conducting different frontline extension activities. Under this scheme,

scientists of J.A.U. visited the adopted villages and disseminate the latest agricultural technologies amongst the farmers. Frontline demonstrations on improved agricultural technologies and improved varieties are being also conducted by the scientists on farmer's field. In addition to this, scientist are in regular contact with the farmers of the adopted villages and extend advisory services through trainings, messages, kisan goshthies and mobile based advisories, literature support provided etc.

No. of Team of Scientists	No. of Scientists	No. of Villages	No. of Blocks	No. of Districts	Bench Mark Survey conducted (No. of villages)
30	117	150	23	8	150

### Activities undertaken

#### Activities organised under MGMG during 2021-22

No.	Name of activity	No. of activities conducted	No. of farmers benefitted
1	Awareness created	151	2005
2	Demonstrations conducted	20	328
3	Interface meeting/ <i>Goshthies</i>	91	1245
4	Literature support provided	383	3621
5	Training organized	42	988
6	Visit to village by teams	172	2036
7	Mobile based advisories	837	14150
<b>Total</b>		<b>1696</b>	<b>24373</b>

### Other activities organized under MGMG during 2021-22

Table -2 Other activities organized by ICAR Institutes under MGMG

No.	Activity	Particulars	
1	Linkages developed with other agencies	No of Agency (No)	24
		Farmers Benefitted (No)	1191
2	Facilitation for		
	i) New varieties	Numbers	06
		Area (ha)	78
		Farmers Benefitted (No)	305
	ii) Technology (No)	Numbers	7
		Area (ha)	6.8
		Farmers Benefitted (No)	164



No.	Activity	Particulars	
iii) Seeds (q)		Area (ha)	-
		quantity (q)	-
		Farmers Benefitted (No)	-
iv) New crops (No.)		Numbers	2
		Farmers Benefitted (No)	5
v) Other (seedlings, biofert. Poultry bird etc.)		Numbers	7
		Area (ha)	2
		Farmers Benefitted (No)	290

### Photographs of different activities carried out under MGPG



Training organized at Mota Bhandariya village



Training organized at Mendapara village



Diagnostic Visit at Bhiyal village



Diagnostic Visit at Prabhatpur village



Field day in Cotton Crop in Jivapar Village



Field day in Sesamum crop in Vadnagar Village

### 3. Attracting and Retaining Youth in Agriculture (ARYA)

#### A. KVK Targhadia

##### Objectives of the ARYA Project:

1. To attract and empower the youth in rural areas to take up various agriculture, allied and service sector enterprises for sustainable income and gainful employment in selected districts.

2. To enable the farm youth to establish network groups to take up resources and capital intensive activities like post-harvest technology, processing & value addition, nursery management, milk processing and marketing.
3. To demonstrate functional linkage with different institutions and stakeholders for convergence of opportunities available under various schemes / program for sustainable development of youth

##### Training Programme (Year: 2021-22):

No.	Training	No. of Youth participated
1	Nursery management	22
2	Post-harvest technology and value addition	25

#### Various Enterprises at different Villages under ARYA Project:

Entrepreneurship development activities were started with focus of processing & value addition, Milk processing and Nursery management.

##### 1. Mini Oil Mill Unit at Targhadi village of Paddhari taluka:

An entrepreneurial group of 15 rural youths in Taraghadi village started enterprise of Mini Oil Mill unit and producing groundnut oil through processing of groundnut. The group earned net profit of Rs. 1,74,800 per month by selling groundnut oil and cake. This enterprise is run more than 8 month during the year and earning net profit of Rs. 13,11,000 per year.

##### 2. Mini Oil Mill Plant at Raningpar village of Jasdan taluka:

The group of 15 rural youths in Raningpar village is earning upto Rs. 1,42,025 per month through processing of groundnut by enterprise of mini oil mil/plant. This enterprise is run more than 8 month during the year and earning net profit of Rs. 10,62,750 per year.

##### 3. Entrepreneurship development through spices processing:

An enthusiastic group of 7 rural youths in Gadhaka village started enterprise of Spice processing unit and earning upto Rs. 61,500 per month. This enterprise is run more than 6 month during the year and earning net profit of Rs. 3,69,125 per year.

#### 4. Entrepreneurship development through Namkeen (Farsan) making:

An entrepreneurial group of 5 youths at Targhadia village started Namkeen making enterprise. They are making and selling Namkeen (Farsan) products and earning net profit of Rs. 3,90,000 per year.

#### 5. Milk-Mava making at Ambardi village:

The active group of 8 youths at Ambardi village of Jasdan taluka started milk processing enterprise. They are producing milk-mava by processing of raw milk. The group generated net profit of Rs. 43,750 per month. This enterprise earning net profit of Rs. 4,37,500 per year.

#### 6. Mini cleaning cum grading machine unit at Dungarka village of Paddhari taluka:

An entrepreneurial group of 8 rural youths in Dungarka village started enterprise Mini cleaning

cum grading machine unit. This enterprise is run 5 month during the year and earning net profit of Rs. 2,80,000 per year.

#### 7. Mini Dall Mill unit at Sal Pipaliya village of Paddhari taluka:

An entrepreneurial group of 10 rural youths in Sal Pipaliya village started enterprise Mini Dall Mill unit. This enterprise is run 6 month during the year and earning net profit of Rs. 3,90,000 per year.

#### 8. Nursery unit at Gunda village of Rajkot taluka:

An entrepreneurial group of 4 rural youths in Gunda village started enterprise Nursery unit. This enterprise earning net profit of Rs. 1,80,000 per year.

## B. KVK Amreli

### Details of Progress of ARYA Project

Name of Enterprise	No of Training Conducted	No of Beneficiaries	No of Extension Activities	No of Beneficiaries	No of Unit established	Change in income		No. Of Groups Formed
						Before	After	
Dal mill	3	96	1	150	2	Results are awaited		1
Masala making	2	70	1	37	2			1
Mava making	2	181	2	64	2			1

#### 4. DAMU District Agro-Meteorological Unit (DAMU) Gramin Krishi Mausham Seva (GKMS):

##### A. KVK Jamnagar:

The District Agromet Unit is running successfully in Krishi Vigyan Kendra, JAU, Jamnagar since October 25, 2019 by recruitment of SMS (Agrometeorology) and

Agromet observer. The District Agrometeorological Unit, KVK, JAU, Jamnagar is making Agro weather bulletin for all the 09 blocks viz. Jamnagar, Dhrol, Jamjodhpur, Jodiya, Kalavad and Lalpur in Jamnagar District and Kalyanpur, Khambhaliya and Okhamandal in Devbhumi Dwarka District.

### Number of Weather Bulletin prepare from Jan-Dec, 2021

Devbhumi Dwarka District Block name	No. of Bulletins
Kalyanpur	70
Khambhaliya	70
Okhamandal	70
<b>Total No. of Block wise Weather Bulletin</b>	<b>210</b>





District Name	No. of Bulletins
Jamnagar	105
Block name	
Dhrol	105
Jamjodhpur	105
Jodiya	105
Jamnagar	105
Kalavad	105
Lalpur	105
<b>Total No. of Block wise Weather Bulletin</b>	<b>630</b>

### Dissemination of weather bulletin.

Individually these bulletins are sending to farmers group by short message service (mKisan portal), and by social media by making farmers WhatsApp groups, Facebook.

### Number of farmers

Particular	No. of farmers
Whatsapp Group-19	2904
KVK Facebook page	3090 followers
SMS (mKisan Portal)	70750
KVK Telegram Channel	157 Subscribers

### Farmer Awareness Programmes

Climate based farming is drawing farmer near to precision agriculture. Farmers can mitigate their crops itself against uneven weather patterns, so farmer awareness programmes is more important.

### Farmer Awareness Program (FAP) organized by KVK, JAU, Jamnagar under DAMU Project

No.	FAP/ Farmers meet / Meghdoot Popularization activities	Date	Location			Approx. No. of Farmers/ Participant
			Village	Block	District	
1	Meghdoot App . Popularization, Field visit	19/01/2021	Khoja Beraja	Jamnagar	Jamnagar	10
2	FAP	19/01/2021	Lothiya	Jamnagar	Jamnagar	20
3	FAP, Field visit	20/01/2021	Chandragadh	Jamnagar	Jamnagar	10
4	FAP	19/08/2021	Katada	Dhrol	Jamnagar	15
5	FAP, Meghdoot App. Popularization	19/08/2021	Jayva	Dhrol	Jamnagar	10
6	Field visit	21/09/2021	Jamnagar Block Farmers	Jamnagar Block	Jamnagar	96
7	AWS site visit	22/09/2021	Kalavad Block Farmers	Kalavad Block	Jamnagar	95





No.	FAP/ Farmers meet / Meghdoot Popularization activities	Date	Location			Approx. No. of Farmers/ Participant
			Village	Block	District	
8	FAP	23/09/2021	Dhrol Block Farmers	Dhrol Block	Jamnagar	100
9	AWS site visit	29/09/2021	KVK, Jamnagar	Jamnagar	Jamnagar	25
10	FAP, Field visit	6/10/2021	Samor	Jamkhambhadiya	Devbhumi Dwarka	13
11	AWS site visit	10/11/2021	KVK, Jamnagar	Jamnagar	Jamnagar	2
12	FAP, Field visit	16/12/2021	Keshod	Jamkhambhadiya	Devbhumi Dwarka	23
13	AWS site visit	24/12/2021	KVK, Jamnagar	Jamnagar	Jamnagar	15
14	AWS site visit	25/12/2021	KVK, Jamnagar	Jamnagar	Jamnagar	89
15	Krushi Mela / FAP, Meghdoot App. Popularization	28/12/2021	Jamnagar	Jamnagar	Jamnagar	1787
Total						2310

### Article Publication

“Zero Budget Natural Farming: A New Appraisal”  
Sabujeema: An International Multidisciplinary e-  
Magazine Volume-1 issue-1 April-2021

### News Coverage in vernacular language

- 1) 'ઉનાળુ પાકોમાં પાનકથીરીનો વધતો જતો ઉપદ્રવ'  
Krushi Prabhat on Date: 13/02/2021
- 2) 'ઉનાળુ ધાન્ય પાકોની કથીરીના ઉપદ્રવ વિષે જાણો'  
Krushi Prabhat on Date: 15/02/2021
- 3) 'મગફળી-તલ અને શાકભાજી પાકોમાં આવતી  
કથીરીનું સંકલિત નિયંત્રણ' Krushi Prabhat on  
Date: 16/02/2021
- 4) 'ઉનાળું તલની સફળ ખેતીના ચાવીરૂપ મુદ્દાઓ'  
Krushi Prabhat on Date: 20/02/2021
- 5) 'શું તૌકતે' વાવાઝોડાની નૈઋત્યના ચોમાસા પર  
અસર થશે' Krushi Prabhat on Date: 22/05/2021

- 6) ગ્રામીણ કૃષિ મૌષમ સેવા પ્રોજેક્ટ અંતર્ગત જીલ્લા  
કૃષિ હવામાન એકમ દ્વારા કરવામાં આવતી ખેડૂત  
ઉપયોગી કામગીરી' Krushi Prabhat on Date:  
28/06/2021





Farmers awareness programme



Farmers awareness programme



Awareness programme in Krushi Mela



Farmers awareness programme

## B. KVK Amreli:

The District Agromet Unit is running successfully in Krishi Vigyan Kendra, JAU, Amreli since October 25, 2019 by recruitment of SMS (Agrometeorology) and Agromet observer. The District Agrometeorological Unit, KVK, JAU,

Amreli is making Agro weather bulletin for all the 11 blocks viz. Amreli, Babra, Bagasara, Dhari, Jafrabad, Khambha, Lathi, Liliya, Kunkavav-vadiya, Rajula and Savarkundla of the Amreli district and also for the District itself.

## Activities under DAMU:

### I. Number of Weather Bulletin prepared from January – December 2021

District Name	No. of Bulletins
Amreli	104
Block name	No. of Bulletins
Amreli	104
Babra	104
Bagasara	104
Dhari	104



Block name	No. of Bulletins
Jafrabad	104
Khambha	104
Kunkavav Vadiya	104
Lathi	104
Liliya	104
Rajula	104
Savarkundla	104
<b>Total No. of Block wise Weather Bulletin</b>	<b>1144</b>

**II. Number of farmers connected**

Particular	No. of farmers
Whatsapp Group- 17	2356
Telegram Group - 1	194 Subscribers
Facebook page	1880 followers

**III. Detail of farmers connected through WhatsApp**

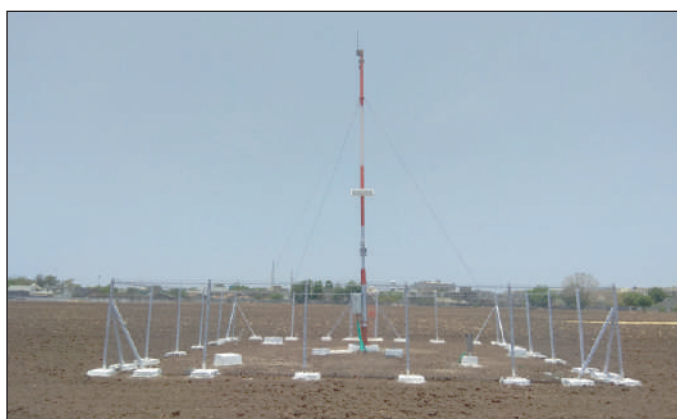
Name of the Block	Total Village in Block	No. of WhatsApp Group	No. of Farmers Covered	No. of Villages Covered	No. of Extension Workers at panchayat / village level
Amreli	71	4	694	59	10
Babra	57	2	335	48	7
Bagasara	34	2	286	29	4
Dhari	75	1	162	42	8
Jafrabad	42	1	51	20	5
Khambha	57	1	127	45	3
Kunkavav-Vadia	45	2	261	41	5
Lathi	49	1	100	28	8
Lilia	37	1	78	38	6
Rajula	72	1	120	25	4
Savarkundla	80	2	276	51	15
<b>Total</b>	<b>619</b>	<b>18</b>	<b>2490</b>	<b>426</b>	<b>75</b>

**IV. Farmer Awareness Program (FAP) organized by KVK, JAU, Amreli under DAMU**

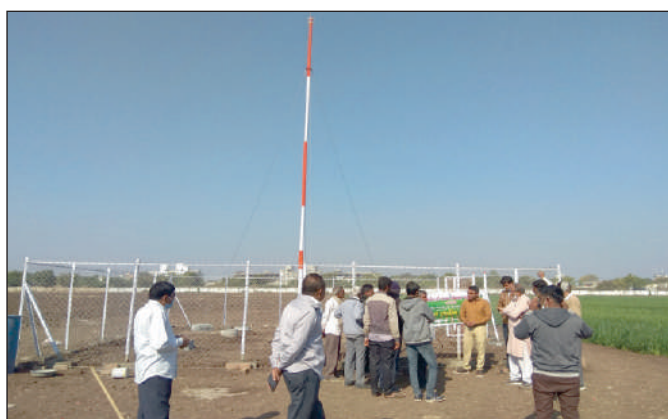
No.	FAP/ Farmers meet /Meghdoot Popularization activities	Date	Location		Approx. No. of Farmers attended the Program
			Village	Block	
1	FAP, App. Popularization,	16-01-21	Lilia	Lilia	25
2	FAP, Meghdoot App. Popularization	18-01-21	Halriya	Bagasara	24
3	FAP, Meghdoot App.Popularization, Field visit	20-01-21	Sukhpur	Babra	12

No.	FAP/ Farmers meet /Meghdoot Popularization activities	Date	Location		Approx. No. of Farmers attended the Program
			Village	Block	
4	FAP, Meghdoot App. Popularization	15/07/21	Amreli	Amreli	29
5	FAP, Meghdoot App. Popularization	14/09/21	Mangvapal	Amreli	47
6	FAP, Meghdoot App. Popularization	23/09/21	Pithadiya	Bagasara	61
<b>Total</b>					<b>198</b>

### Photographs of different activities carried out under DAMU Amreli



Automatic weather station at KVK Amreli



Farmers visited Automatic weather station





## Photographs of different activities during 2021-22



Hon'ble State Minister visited Agri Gujarat Expo - 2021



Hon'ble Agriculture Minister Visited KVK Amreli



Collaborative training with EEI, Anand



Celebration of Sardar Patel Jayanti at SSK



Online Varsha Vigyan Parisavand





Vruksh Vitran Rath Opening



Pro. (Dr.) N. K. Gotia, Hon' ble Vice Chancellor  
visited KVK Pipalia



On Campus training programme by KVK Amreli



FLD by KVK Pipalia



FLD by KVK Traghadia





Celebration of field day by KVK Nana Kandhasar



FLD by KVK Morbi



Field Day by KVK Khapat



SAC meeting at KVK Jamnagar



World Women Day Celebration by KVK Amreli





Pashupalan Shibir by KVK Nana Kandhasar



Posan Maha celebration by KVK Morbi



Technology week celebration by KVK Traghadia



Khedut shibir by KVK Pipalia



Exposor visit by KVK Targhadia





Drone Technology Demo by KVK Khapat



Kisan Mela Organized by KVK Amreli



International women day by KVK Jamnagar




Kishan goshthi by KVK Jamnagar



Input Delear's Course Opening

## Case study / Success story

		<div>PROFILE OF FARM INNOVATORS</div> <div>Thematic Area: Horticulture with Micro irrigation</div> <div>“Entrepreneurship Development through Organic Farming &amp; Value addition”</div> <div>Dr. K. P. Baraiya, Smt. A. K. Baraiya</div> <div>Krishi Vigyan Kendra</div> <div>Junagadh Agricultural University, Jamnagar</div>	
1. Personal Profile		2. Problem/ challenge Faced	
Name of farmer	: Khirsariya Rajnikantbhai (Bhupatbhai) Karshanbhai	<div>Khirsariya Rajnikantbhai (Bhupatbhai) Karshanbhai</div> <div>is only 10 class educated, having 10 Gir cow, having 7.2 ha land with different ordinary cropping pattern. He lived in very interior village Morzar, Ta. Bhanvad of District Devbhumi Dwarka (Earlier Jamnagar District). He faces following challenges in his life</div> <div><ul style="list-style-type: none"><li>Low education (10 Std.)</li><li>Labour chrysi&amp; high cost</li><li>Poor understanding labour</li><li>Lack of marketing</li><li>High production cost</li><li>High chemical fertilizer, pesticides etc. usages.</li><li>Resurgence of pest &amp; Disease</li><li>Poor soil fertility</li><li>Lack of scientific technology knowhow</li></ul></div> <div>From starting, he used more pesticide and Chemical fertilizer due to that increase cost of cultivation and reduce net profit.</div>	
Contact No.	: 9825208551 Khirsariyaraj @gmail.com		
Address Res.	: “Shree Apartment, Ground floor, Ambaji Kadva Main Road, Rajkot-360 004 (Gujarat)		
Address Farming	: At. Morzar, Ta. Bhanvad, Dist. Devbhumi Dwarka		
Age	: 54 Years		
Education	: 10 Standard		
Land holding	: 7.2 ha		
Crops grown	: Groundnut, Medicinal Plants, Vegetables, Cereals, Grains Moringa, Lemon, Tomato, okra, cucumber, ridge gourd, etc.		
Livestock	: Cow-20 Gir breed		
Business	: Organic Farming, Animal keeping & marketing with Value addition		
Special recognition	: Innovative and Progressive farmer		
3	<div>Description of innovative practice/technology</div> <div><ul style="list-style-type: none"><li>Started Gir cow unit</li><li>Adopt micro irrigation system</li><li>Innovative in farming with lemon cultivation</li><li>Multi story farming</li></ul></div>		

	<ul style="list-style-type: none"> <li>● Vegetable grow organically</li> <li>● One step ahead in chemical less farming</li> <li>● Cow based medicines preparation</li> <li>● Cow based FYM &amp; Gaumutra usages for cultivation.</li> <li>● Prepare health and nutritional product from moringa</li> <li>● Value addition in fruit &amp; vegetable, moringa powder</li> <li>● Lemon cultivation with organically</li> <li>● Grading and packing of lemon</li> <li>● Market at New Delhi, Mumbai, Ahmedabad, Surat, etc.</li> <li>● For more profit “do not gave farming on rental basis, but kept daily labour”</li> <li>● Using Drip Irrigation for application of Jivamrut and even for cow urine.</li> <li>● Processing Unit for Post Harvest treatment for products.</li> <li>● Well-equipped Cow Shed.</li> </ul> <p>Value Addition, Ayurvedic medicines, Gir Cow-based Organic farming, health &amp; Nutritional based products preparation &amp; Marketing</p> <p>Awareness to farmers for value addition in agricultural products. He is farming with cow-based organic farming, since last 10 years. He is using multistory farming with moringa (Drum stick) + vegetables, Micro irrigation usages. His moto for “Do not gave farm to partnership to labour, but kept labour every day basis, then you can profit more”. He spread technologies from every government program and advise to farmers about his success and follow him for success. Prepare ayurvedic medicines, nutritional based product and value added and pack it and directly marketing through “Mall”, he initiated the mall concept and joined to different organic growers in his marketing system and support them.</p> <p>He produces and pack themselves Gir Cow Ghee, health and nutrient product, rock salt, Produce groundnut organically and extract oil with attractive packing, babul fali powder, etc.</p>
4	<p><b>Salient features</b></p> <ul style="list-style-type: none"> <li>● Organic mall</li> <li>● One step chemical less produce</li> <li>● Health and hygienic produce</li> <li>● Best farmers award</li> <li>● Acting as ambassador for organic produce</li> <li>● Support to other farmers for marketing</li> <li>● Farmers to farmers dissemination of technology</li> </ul> <p>Krushirushi in Krishi Mahotshav programme</p>
5	<p><b>Practical utility</b></p> <ul style="list-style-type: none"> <li>● Labour saving,</li> <li>● High marketing price</li> <li>● Consult him for value addition</li> <li>● Fresh vegetable available from “Organic Mall”</li> <li>● Drumstick powder having high medicinal value</li> </ul>

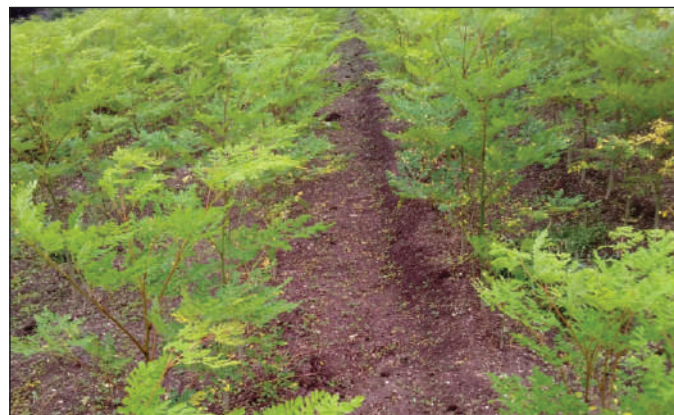




<b>6</b>	<b>Source of information</b> Continuous contact with KVK and ATMA also visit exposure training at JAU, Junagadh she motivate for vegetable cultivation. Then, she started vegetable cultivation viz., okra, cucumber, tomato, ridge gourd, etc. Rajnikant K. Khirsariya has already 30 days (200 Hours) skill training course also done from Krishi Vigyan Kendra, JAU, Jamnagar		
<b>7</b>	<b>Economics/Profitability of innovative practice/ technology (costs and return) (per intervention or area or household)</b> The price of tomato earned Rs. 7 to 10 per kg (average Rs. 8/kg). Gross earning is Rs. 5 lakhs per hectare and the cost of production of tomato was 1.25 lakhs per hectare. Thus, net benefit Rs. 3.75 lakhs per hectare CBR=(1:3)		
<b>8</b>	<b>Details of result obtained due to the adoption of technologies</b>		
	<b>Particulars</b>	<b>Before NF</b>	<b>After NF</b>
	Crop Production (q/ha)	24	36
	Cost of Production per hectare (Rs)	25000	Nil
	Net profit per hectare (Rs)	200000	700000
	Number of Sprays	5	8 Spray Jivamrut, Dasparni Ark etc.
	Cost of Spray (Rs)	11200	500
	Natural Resource saved/ conserved like Soil, water etc.	Irrigation-8	Irrigation-5 Soil Conservation, Decreased Soil Erosion, Increased Soil Carbon
	Product Quality Improvement	POOR	BEST QUALITY
	Marketing Strategy	APMC	Developed Processing Unit, Self-Selling by proper marketing, grading, packaging
<b>9</b>	<b>Potential : Acceptance level, horizontal spread of innovation and number of farmer adopting</b> During the era of organic farming, she has appreciated for the cultivation of organic vegetable cultivation and started one steps in an innovative work. Many farmers of the district were visited her farm. She got many awards for the animal keeping and vegetable cultivation. Door Darsha has special recorded her success story and broadcast from DD Girnar Channel during Mahila Jagat Programme. Thus, horizontal of the technology in district as well as whole state through telecasting.		



## 10 Illustrate with Photographs





### Thematic Area: Organic Cultivation

## **“Organic Exotic Fruit and Vegetable cultivation with its Value Addition”**

Krishi Vigyan Kendra

Junagadh Agricultural University, Jamnagar

1. Personal Profile			2. Organic Exotic Fruit and Vegetable cultivation with its Value Addition
Name of farmer	:	Jesadiya Vishal Lavjibhai	<p>Jesadiya Vishal Lavjibhai is young &amp; enthusiastic farmer of Anandpar village, of Kalavad Taluka, Jamnagar district. Anandpar is well attached on Kalavad-Rajkot highway, and it is very near to Rajkot (the capital city of Saurashtra region).</p> <p>This village is 22 km from Kalavad and 27 km from Rajkot. It come under North Saurashtra Agro-Climatic Zone having hardly 350 to 400 mm erratic rainfalls. Anandpar having no any irrigation facility available as well as no any reservoir (Dam). They completely depend on rainfall.</p> <p>After completion of graduation Vishal has started service of marketing in the corporate (pesticide and seed) company. During this job, he visited different progressive farmers and different cropping patters of farmers. He was very interested in organic farming as well as in horticultural crop grown. Along with the service he has started his normal farming with his father. During this period, he doing different experiment of new fruit and vegetable crops on his farm, but at the starting his father has not support for the different experiments done on his own</p>
Contact No.	:	9558379098	
Address	:	At.- Anandpur, Ta. Kalavad Dist.- Jamnagar	
Age	:	29	
Education	:	Graduate	
Land holding	:	2.09 ha	
Crops grown	:	Dragon Fruit, avocado, Persimmon, apple, Strawberry, purple flower, Thai basil, broccoli, green kale, lettuce, American red kale, Zucchini, Knolkhol, Celery	
Livestock	:	Cow – 1, Heifers –2,	
Business	:	Farming,	
Special recognition	:	Innovative and Progressive farmer	



			field. He come in contact Scientist of Krishi Vigyan Kendra, JAU, Jamnagar during field work in the district. He also visited different states with ATMA project for this study. He also visited Department of Horticulture at JAU, Junagadh, and also contact to Dy. Director of Horticulture, Jamnagar for horticulture farming. Thus, encourages for organic farming with exotic vegetable and fruit cultivation.
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### 3. Practical Utility of the Innovation/ Mode etc.

Jesadiya Vishal Lavjibhai is young, enthusiastic and innovative farmer. Now a day's organic era is come back in the country. People need chemical less and quality food products. The economics of the Indian people have been increased as compare to three decades back. He doing common farming practices like groundnut, cotton, onion, wheat, etc. with his father up to his study period. After completion of study, he started service in corporate company. During this period, he has started new experiment on his farm with his father. But his father does not support him for different experiment of new fruit and vegetable. Then, he thought for the think out of box and started separate farming business. He has work hard and get knowledge for cultivation of different exotic vegetables as well as fruits crops. He started dragon fruit and strawberry cultivation. He also established dragon fruit nursery for true to type sapling. He supplies saplings to many farmers for development of dragon fruit plantation. His nursery was approved by Central Horticultural Board, Government of India. He started different value-added products from dragon fruit with the help of Krishi Vigyan Kendra, JAU, Jamnagar.

He joined interstate tour of ATMA project, and visited Dr. Y. S. Parmar University, Shimla and participation in the seminar of strawberry cultivation held at New Delhi under Department of Horticulture, programme. He stated strawberry cultivation on his own farm in Anandpur. Thus, he proved that the crop of tropical region can also grow in sub-tropical region. He also sales by packing in attracting packaging.

Then, after the growth cannot stop at this step, he established "Gujarat Green Organic Farm" he grow many other exotic fruits like avocado, Persimmon, apple, Strawberry etc. On another hand, he has started many vegetables. cultivation of local and exotic like purple flower, Thai basil, broccoli, green kale, lettuce, American red kale, Zucchini, knolkhol, Celery etc. on his field at Anandpur.

Vishalbhai sales all these produce to the hotels, direct consumers and earn Economics of cow unit.

Year	Crop	Area ha.	Production kg/ha	Total Income Rs.	Total Cost Rs.	Net Income Rs.
2018-19	Dragon Fruit	0.3	500	180000	20000	160000
2019-20	Dragon Fruit	0.3	1200	240000	20000	220000
	Strawberry	0.16	3000	300000	60000	240000
2020-21	Dragon Fruit	0.3	1500	300000	20000	280000
	Strawberry	0.16	3500	350000	60000	290000

Vishalbhai sales all exotic fruit and vegetables to the hotels and direct consumers with good earning. Thus, he also sales sapling from his certified nursery and earn very good then fruit and vegetable production.

Around 15 farmers visit his nursery and started their own fruit and vegetable cultivation. Thus, horizontal spread of technology is very high.  
Thus, really he has efforts more and achieve a big hight.

### Action Photographs









● 2012 年 4 月 27 日



પાણી ભરી રાખવામાં આવે છે, જેથી તેમાં મૂળ કુદી નીકળતા જમીનમાં વાયેતર કરવામાં આવે છે. આ સાથે જો એલોકાસેના જૂનો પ્લાન્ડ હોઈ તો તેની ડાળીની કક્ષમ અનાવી રોપવામાં આવે છે. કકત કલિયાનું જમીનમાં વાયેતર કરવામાં આવ્યું હોય તો ૪ વર્ષ અને કલિયા પર કક્ષમ રોપવામાં આવે તો ૨ વર્ષ કક્ષમ છે. એલોકાસેના વાયેતરને ૦થી ૩૬ ઇંચી વાપાનું ૧૦ ઇંચ સુધીની ડાળીની

પાણી ખેતી રાખવામાં આવે છે, જેથી તેમાં મુજબ કુદી નીચાતા જમીનમાં વાવેતર કરવામાં આવે છે. આ સાથે જો એવોલાડોનો જુવા પાણી હોઈ તો તેની ડાળીની કસમ કરાવી રોવામાં આવે છે. કસ્ટ કાંચાનું જમીનમાં વાવેતર કરવામાં આવ્યું હોય તો 4 વર્ષ અને કાંચાને રૂબ રૂબ વાવેતરમાં આવે તો 2 વર્ષ કસમ મળે છે. એવોલાડોના વાવેતરની કિંમત 35 રૂાઈ તાપખાન, વડુ બેલર અથવા કાચ આવે છે. એવોલાડોની ખેતરમાં એવોલાડોની કિમત 5થી 25 હોઈ અને ભલ્લમાં ૨, 500 છે, એવોલાડો અંદરથી ખૂબ જ નર્મ હોવાથી ખેડેર કુદ તરીકે પણ એવોલાડમાં આવે છે. યોકેર, કાટ, રોડ, પિડર, એકોન જેવા 15 પ્રકારના એવોલાડો હોઈ છે.

દેશમાં ઓહુ ઉત્પાદન હોવાનું  
કારણ વાતાવરણ : કૃષિ નિષ્ણા

04252 Sept 1992

સોટેસ - ફેસ્ટોસમાં વિવિધ પ્રકારના  
ચાકમાં એક્સોટિક શાકભાજીનું  
પ્રમાણ ઉમેરવા પર આકર્ષક અને  
સ્વાદિષ્ટ બને છે.

સાધનિક સેવાઓ પર કરી ખેંચતો સારી આવક મેળવી રહ્યા છે. વિદેશમાં જતાં કેટલાક શાકભાજીની આવકના દેશમાં પણ ખૂબ માન વધી છે. ત્યારે કેટલાક ઘોડા વિદેશથી શાકભાજી આયાત કરે છે, પરંતુ ભારત દેશના સતત પ્રત્યનશીલ ખેતી સંશોધન કરી વિદેશી શાકભાજીને વાલેરે ભારતમાં આપી શકે કરવા લાગ્યા છે. એક્સોટિક શાકભાજીમાં મયૂર વખતે જાય છે.

મોટેભાગે રહેલોગામી વિવિધ પ્રકારના  
 રાજાઓએ એકોટિક રાજાઓના  
 પ્રમાણ ઉપરના પર આધારિત એક  
 એકોટિક રાજાઓના  
 રાજાઓ કિલ્લાઓમાં મોટા પાયા  
 વાણેજ્ય કરવા લાગ્યા છે. પંચમ  
 ક્ષેત્રના, પાયા ભાગના, પ્રોત્તી,  
 ક્ષેત્રના કે, લેન્ટુ, એપેરિકન રાજા  
 રાજા, નોન રાજા, યુનિટી મલો -  
 ક્ષેત્રના રાજાઓના મોટા ભાગે  
 રાજાઓ, એપેરિકન તથા યુરોપિયન  
 રાજાઓ વાણેજ્ય કરવામાં આવે છે.  
 ભારે સંશોધન થઈ રાજાઓના  
 મોટા પાયાના રાજાઓના

વાવેતર કઠી સારી આવક મેળવી રહ્યા છે. રાજકોટથી માત્ર 17 કિમીના અંતરે આવેલા અણપર મામ ખાતે ખેતી કરીને વિશાલ જોડણિયાના જીવાના અનુસાર, ખેડોગ્રાફિક ટાલકમીજનું વાવેતર કરવામાં પ્રતિ વિષામાં રૂ. 20 જેટલો જેટલો અર્થ થાય છે જેખરે તેની સાથે રૂ. ટ્રેક લાખ જેટલી આવક થાય છે. સામાન્ય રીતે આ પાકનું વાવેતર મિથાળા પ્રદેશના કરવામાં આવે છે, જેનું વેચાણ અખારે જાજોર, અમદાવાદ ખાતે ભોગો ભાંગે હોય છે. રેસીરામાં કરવામાં આવે છે.

અહીં વાપેતર ન થવાનું મુખ્ય કારણ ઓછી જાગૃતિ



તોપણ કારણ ખેડોની ઓછી જામતતા અને હવામાનની અનુકૂળતા છે.

**ગલ્ફ દેશોમાં આ શાકભાજીની ધૂમ માંગ**  
વિશાલ જેસડિયાના જણાવ્યા અનુસાર, ગલ્ફ દેશોમાં શાકભાજી પણ ભારતમાંથી નિકાલ કરવામાં આવે છે, ત્યારે અમવાત દિલ્હોમાં તે દેશોમાં પણ એક્સપોર્ટ શાકભાજીની માંગ વધુ હોવાથી નિકાલ કરવામાં આવે તે ૪૫ થી ૫૦ ટકા અવધક થઈ શકાય છે.





